TEJUS
CONSULTANTS

BITUMEN CONTENT AND GRADATION DETERMINATION OF DENSE BITUMINOUS MACADAM MIX

Name of Work	:	Developments works to be under taken in Ward No.05 of BBMP around Solid Waste Disposal Processing units Bellahalli, Bagaluru and Kattigenahalli Byatarayanapura Constituency.
Client	:	Bruhat Bengaluru Mahanagara Palike
Consultant	:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	:	Sri.A G Narayana Swamy.
Date of Testing	:	18-02-2022
Type of Mix	:	DBM
Sample I/D	:	DBM-6

DETERMINATION OF BITUMEN CONTENT

Description	Trail 1	Trail 2
1. Weight of Mixture before extraction, g	882	936
2. Weight of Mixture after extraction, g	844	895
3. Weight of Bitumen	38	41
4. Weight of filter paper before extraction, g	2.00	2.00
5. Weight of filter paper after extraction, g	4.00	4.00
6. Weight of fines, g	2.00	2.00
7. Weight of Bitumen & fines	40.00	43.00
8. Bitumen content in %	4.54	4.59
9. Average Bitumen content in %	4.56	
10. Minimum Bitumen content in %	4.50	

GRADATION FOR DBM AFTER EXTRACTION

(As per MORT&H 500-10,Grading-2)

Sample Location:	Chokkanahalli main road	**Date of Sampling:**	18-02-2022
		Date of testing:	18-02-2022
Type of material & Purpose:	DBM	**Oven Dry Wt.(gms):**	844

IS Sieve size in mm	Weight retained	Cummulative weight retained (gm)	Cummulative % of retained	Cummulative % of passing	Specification limits
37.50	0.0	0.0	0.00	100.00	100.00
26.50	41.0	41.0	4.86	95.14	90-100
19.00	133.0	174.0	20.62	79.38	71-95
13.20	113.0	287.0	34.00	66.00	56-80
4.750	165.0	452.0	53.55	46.45	38-54
2.360	99.0	551.0	65.28	34.72	28-42
0.300	146.0	697.0	82.58	17.42	7-21
0.075	98.0	795.0	94.19	5.81	2-8
Pan	49.0	844.0			
Total	844.0				

Note:

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4. The material used in the site satisfied the standard of MORTH's 5th revision and hence can be used in the works.

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

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Consultant's Representative

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CONSULTANTS

BITUMEN CONTENT AND GRADATION DETERMINATION OF DENSE BITUMINOUS MACADAM MIX

Name of Work	:	Developments works to be under taken in Ward No.05 of BBMP around Solid Waste Disposal Processing units Bellahalli, Bagaluru and Kattigenahalli Byatarayanapura Constituency.
Client	:	Bruhat Bengaluru Mahanagara Palike
Consultant	:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	:	Sri.A G Narayana Swamy.
Date of Testing	:	18-02-2022
Type of Mix	:	DBM
Sample I/D	:	DBM-5

DETERMINATION OF BITUMEN CONTENT

Description	Trail 1	Trail 2
1. Weight of Mixture before extraction, g	896	935
2. Weight of Mixture after extraction, g	856	894
3. Weight of Bitumen	40	41
4. Weight of filter paper before extraction, g	2.00	2.00
5. Weight of filter paper after extraction, g	4.00	4.00
6. Weight of fines, g	2.00	2.00
7. Weight of Bitumen & fines	42.00	43.00
8. Bitumen content in %	4.69	4.60
9. Average Bitumen content in %	4.64	
10. Minimum Bitumen content in %	4.50	

GRADATION FOR DBM AFTER EXTRACTION

(As per MORT&H 500-10,Grading-2)

Sample Location:	Chokkanahalli main road	**Date of Sampling:**	18-02-2022
		Date of testing:	18-02-2022
Type of material & Purpose:	DBM	**Oven Dry Wt.(gms):**	856

IS Sieve size in mm	Weight retained	Cummulative weight retained (gm)	Cummulative % of retained	Cummulative % of passing	Specification limits
37.50	0.0	0.0	0.00	100.00	100.00
26.50	42.0	42.0	4.91	95.09	90-100
19.00	128.0	170.0	19.86	80.14	71-95
13.20	118.0	288.0	33.64	66.36	56-80
4.750	160.0	448.0	52.34	47.66	38-54
2.360	105.0	553.0	64.60	35.40	28-42
0.300	183.0	736.0	85.98	14.02	7-21
0.075	65.0	801.0	93.57	6.43	2-8
Pan	62.0	863.0			
Total	856.0				

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4. The material used in the site satisfied the standard of MORTH's 5th revision and hence can be used in the work.

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

Consultant's Representative

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TEJUS CONSULTANTS

DETERMINATION OF RATE OF SPREAD TACK COAT				
Name of Work :	Developments works to be under taken in Ward No.05 of BBMP around Solid Waste Disposal Processing units Bellahalli, Bagaluru and Kattigenahalli Byatarayanapura Constituency.			
Client :	BRUHAT BANGALORE MAHANAGARA PALIKE			
Consultant :	M/s Tejus Consultants			
Contractor :	Sri.A G Narayana Swamy.			
Date of Testing :	19-02-2022			
Type of Mix :	Tack coat			
Sample I/D :	5			
Location :	Capital school opp road			
Determination	**Unit**	**Test No**		
		1	**2**	**3**
Location :	**Chainage**	**@20**	**@40**	**@90**
Size of Plate (mxm)	Mt	0.30 x .30	0.30 x .30	0.30 x .30
Area of Plate (a)	Sq.mtr	0.09	0.09	0.09
Initial Wt of empty Plate (b)	Kg	0.756	0.796	0.785
Final weight of plate after application of tack Coat (c)	Kg	0.779	0.819	0.808
Weight of tack Coat (d=c-b)	Kg	0.023	0.023	0.023
Rate of spread of tack coat	Kg/sq.m	0.251	0.251	0.252
Average	Kg/sq.m	0.251		
Specified Limit	Kg/sq.m	**0.250 Kg/sq.m**		

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DETERMINATION OF RATE OF SPREAD TACK COAT

Name of Work :	Developments works to be under taken in Ward No.05 of BBMP around Solid Waste Disposal Processing units Bellahalli, Bagaluru and Kattigenahalli Byatarayanapura Constituency.
Client :	BRUHAT BANGALORE MAHANAGARA PALIKE
Consultant :	M/s Tejus Consultants
Contractor :	Sri.A G Narayana Swamy.
Date of Testing :	19-02-2022
Type of Mix :	Tack coat
Sample I/D :	5
Location :	Capital school opp road

Determination	**Unit**	**Test No**		
		1	**2**	**3**
Location :	**Chainage**	**@20**	**@40**	**@90**
Size of Plate (mxm)	Mt	0.30 x .30	0.30 x .30	0.30 x .30
Area of Plate (a)	Sq.mtr	0.09	0.09	0.09
Initial Wt of empty Plate (b)	Kg	0.756	0.796	0.785
Final weight of plate after application of tack Coat (c)	Kg	0.779	0.819	0.808
Weight of tack Coat (d=c-b)	Kg	0.023	0.023	0.023
Rate of spread of tack coat	Kg/sq.m	0.251	0.251	0.252
Average	Kg/sq.m	0.251		
Specified Limit	Kg/sq.m	**0.250 Kg/sq.m**		

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DETERMINATION OF RATE OF SPREAD TACK COAT				
Name of Work :	Developments works to be under taken in Ward No.05 of BBMP around Solid Waste Disposal Processing units Bellahalli, Bagaluru and Kattigenahalli Byatarayanapura Constituency.			
Client :	BRUHAT BANGALORE MAHANAGARA PALIKE			
Consultant :	M/s Tejus Consultants			
Contractor :	Sri.A G Narayana Swamy.			
Date of Testing :	19-02-2022			
Type of Mix :	Tack coat			
Sample I/D :	6			
Location :	Chokkanalli main road			
Determination	**Unit**	**Test No**		
		1	**2**	**3**
Location :	**Chainage**	**@750**	**@800**	**@875**
Size of Plate (mxm)	Mt	0.30 x .30	0.30 x .30	0.30 x .30
Area of Plate (a)	Sq.mtr	0.09	0.09	0.09
Initial Wt of empty Plate (b)	Kg	0.789	0.802	0.810
Final weight of plate after application of tack Coat (c)	Kg	0.812	0.825	0.833
Weight of tack Coat (d=c-b)	Kg	0.023	0.023	0.023
Rate of spread of tack coat	Kg/sq.m	0.253	0.252	0.253
Average	Kg/sq.m	0.253		
Specified Limit	Kg/sq.m	**0.250 Kg/sq.m**		

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Asst. Executive Engineer
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BITUMEN CONTENT AND GRADATION DETERMINATION OF BITUMINOUS CONCRETE MIX

Name of Work	:	Developments works to be under taken in Ward No.05 of BBMP around Solid Waste Disposal Processing units Bellahalli, Bagaluru and Kattigenahalli Byatarayanapura Constituency.
Client	:	Bruhat Bengaluru Mahanagara Palike
Consultant	:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	:	Sri.A G Narayana Swamy.
Date of Testing	:	19-02-2022
Type of Mix	:	BC
Sample I/D	:	BC6

DETERMINATION OF BITUMEN CONTENT

Description	Trail 1	Trail 2
1. Weight of Mixture before extraction, g	890	912
2. Weight of Mixture after extraction, g	843	864
3. Weight of Bitumen	47	48
4. Weight of filter paper before extraction, g	2.00	2.15
5. Weight of filter paper after extraction, g	4.10	4.00
6. Weight of fines, g	2.10	1.85
7. Weight of Bitumen & fines	49.10	49.85
8. Bitumen content in %	5.52	5.47
9. Average Bitumen content in %	**5.49**	
10. Minimum Bitumen content in %	**5.40**	

GRADATION FOR BC AFTER EXTRACTION
(As per MORT&H 500-18,Grading-2)

Sample Location:	Capital school opp road	Date of Sampling:	19-02-2022
		Date of testing:	**19-02-2022**
Type of material & Purpose:	**BC**	Oven Dry Wt.(gms):	843.0

IS Sieve size in mm	Weight retained	Cummulative weight retained (gm)	Cummulative % of retained	Cummulative % of passing	Specification limits
19.00	0	0	0.00	100.00	100.00
13.20	85	85.0	10.08	89.92	79 - 100
9.50	112	197.0	23.37	76.63	71 - 95
4.75	114	311.0	36.89	63.11	53 - 71
2.360	123	434.0	51.48	48.52	42 - 58
1.180	110	544.0	64.53	35.47	34 - 48
0.600	65	609.0	72.24	27.76	26 - 38
0.300	69	678.0	80.43	19.57	18 - 28
0.150	42	720.0	85.41	14.59	12 - 20
0.075	73	793.0	94.07	5.93	4 - 10
Pan	50.0	843.0			
Total	843.0				

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AE

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BITUMEN CONTENT AND GRADATION DETERMINATION OF BITUMINOUS CONCRETE MIX

Name of Work	:	Developments works to be under taken in Ward No.05 of BBMP around Solid Waste Disposal Processing units Bellahalli, Bagaluru and Kattigenahalli Byatarayanapura Constituency.
Client	:	Bruhat Bengaluru Mahanagara Palike
Consultant	:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	:	Sri.A G Narayana Swamy.
Date of Testing	:	19-02-2022
Type of Mix	:	BC
Sample I/D	:	BC5

DETERMINATION OF BITUMEN CONTENT

Description	Trail 1	Trail 2
1. Weight of Mixture before extraction, g	967	927
2. Weight of Mixture after extraction, g	915	878
3. Weight of Bitumen	52	49
4. Weight of filter paper before extraction, g	2.00	2.15
5. Weight of filter paper after extraction, g	4.00	4.00
6. Weight of fines, g	2.00	1.85
7. Weight of Bitumen & fines	54.00	50.85
8. Bitumen content in %	5.58	5.49
9. Average Bitumen content in %	**5.53**	
10. Minimum Bitumen content in %	**5.40**	

GRADATION FOR BC AFTER EXTRACTION
(As per MORT&H 500-18,Grading-2)

Sample Location:	Vinayaknagar 5th main road	Date of Sampling:	19-02-2022
		Date of testing:	19-02-2022
Type of material & Purpose:	BC	Oven Dry Wt.(gms):	915.0

IS Sieve size in mm	Weight retained	Cummulative weight retained (gm)	Cummulative % of retained	Cummulative % of passing	Specification limits
19.00	0	0	0.00	100.00	100.00
13.20	82	82.0	8.96	91.04	79 - 100
9.50	109	191.0	20.87	79.13	71 - 95
4.75	96	287.0	31.37	68.63	53 - 71
2.360	120	407.0	44.48	55.52	42 - 58
1.180	118	525.0	57.38	42.62	34 - 48
0.600	93	618.0	67.54	32.46	26 - 38
0.300	75	693.0	75.74	24.26	18 - 28
0.150	70	763.0	83.39	16.61	12 - 20
0.075	95	858.0	93.77	6.23	4 - 10
Pan	57.0	915.0			
Total	915.0				

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4. The material tested at the site satisfied the standard of MORTH's 5th revision and hence can be used in the work.

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

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DETERMINATION OF RATE OF SPREAD TACK COAT

Name of Work :	Developments works to be under taken in Ward No.05 of BBMP around Solid Waste Disposal Processing units Bellahalli, Bagaluru and Kattigenahalli Byatarayanapura Constituency.
Client :	BRUHAT BANGALORE MAHANAGARA PALIKE
Consultant :	M/s Tejus Consultants
Contractor :	Sri.A G Narayana Swamy.
Date of Testing :	21-02-2022
Type of Mix :	Tack coat
Sample I/D :	4
Location :	Vinayakanagara 2nd Main Road

Determination	**Unit**	**Test No**		
		1	2	3
Loacation	**Chainage**	**@30**	**@60**	**@80**
Size of Plate (mxm)	Mt	0.30 x .30	0.30 x .30	0.30 x .30
Area of Plate (a)	Sq.mtr	0.09	0.09	0.09
Initial Wt of empty Plate (b)	Kg	0.793	0.807	0.779
Final weight of plate after application of tack Coat (c)	Kg	0.816	0.830	0.802
Weight of tack Coat (d=c-b)	Kg	0.023	0.023	0.023
Rate of spread of tack coat	Kg/sq.m	0.252	0.254	0.252
Average	Kg/sq.m	0.253		
Specified Limit	Kg/sq.m	**0.250 Kg/sq.m**		

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DETERMINATION OF RATE OF SPREAD TACK COAT

Name of Work :	Developments works to be under taken in Ward No.05 of BBMP around Solid Waste Disposal Processing units Bellahalli, Bagaluru and Kattigenahalli Byatarayanapura Constituency.
Client :	BRUHAT BANGALORE MAHANAGARA PALIKE
Consultant :	M/s Tejus Consultants
Contractor :	Sri.A G Narayana Swamy.
Date of Testing :	21-02-2022
Type of Mix :	Tack coat
Sample I/D :	3
Location :	Vinayakanagara 5th Main Road

Determination	**Unit**	**Test No**		
		1	**2**	**3**
Loacation	**Chainage**	**@20**	**@40**	**@60**
Size of Plate (mxm)	Mt	0.30 x .30	0.30 x .30	0.30 x .30
Area of Plate (a)	Sq.mtr	0.09	0.09	0.09
Initial Wt of empty Plate (b)	Kg	0.803	0.852	0.778
Final weight of plate after application of tack Coat (c)	Kg	0.826	0.875	0.801
Weight of tack Coat (d=c-b)	Kg	0.023	0.023	0.023
Rate of spread of tack coat	Kg/sq.m	0.253	0.252	0.253
Average	Kg/sq.m	0.253		
Specified Limit	Kg/sq.m	**0.250 Kg/sq.m**		

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Project Division
Yelahanka Zone
BBMP, Bangalore - 92

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CONSULTANTS

BITUMEN CONTENT AND GRADATION DETERMINATION OF DENSE BITUMINOUS MACADAM MIX

Name of Work	:	Developments works to be under taken in Ward No.05 of BBMP around Solid Waste Disposal Processing units Bellahalli, Bagaluru and Kattigenahalli Byatarayanapura Constituency.
Client	:	Bruhat Bengaluru Mahanagara Palike
Consultant	:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	:	Sri.A G Narayana Swamy.
Date of Testing	:	23-02-2022
Type of Mix	:	DBM
Sample I/D	:	DBM-3

DETERMINATION OF BITUMEN CONTENT

Description	Trail 1	Trail 2
1. Weight of Mixture before extraction, g	896	924
2. Weight of Mixture after extraction, g	853	883
3. Weight of Bitumen	43	41
4. Weight of filter paper before extraction, g	2.00	2.00
5. Weight of filter paper after extraction, g	4.00	4.00
6. Weight of fines, g	2.00	2.00
7. Weight of Bitumen & fines	45.00	43.00
8. Bitumen content in %	5.02	4.65
9. Average Bitumen content in %	4.84	
10. Minimum Bitumen content in %	4.50	

GRADATION FOR DBM AFTER EXTRACTION

(As per MORT&H 500-10,Grading-2)

Sample Location:	Vinayaknagara 2nd main road	**Date of Sampling:**	23-02-2022
		Date of testing:	23-02-2022
Type of material & Purpose:	DBM	**Oven Dry Wt.(gms):**	853

IS Sieve size in mm	Weight retained	Cummulative weight retained (gm)	Cummulative % of retained	Cummulative % of passing	Specification limits
37.50	0.0	0.0	0.00	100.00	100.00
26.50	42.0	42.0	4.92	95.08	90-100
19.00	128.0	170.0	19.93	80.07	71-95
13.20	118.0	288.0	33.76	66.24	56-80
4.750	160.0	448.0	52.52	47.48	38-54
2.360	105.0	553.0	64.83	35.17	28-42
0.300	183.0	736.0	86.28	13.72	7-21
0.075	65.0	801.0	93.90	6.10	2-8
Pan	62.0	863.0			
Total	853.0				

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DETERMINATION OF RATE OF SPREAD TACK COAT

Name of Work :	Developments works to be under taken in Ward No.05 of BBMP around Solid Waste Disposal Processing units Bellahalli, Bagaluru and Kattigenahalli Byatarayanapura Constituency.
Client :	BRUHAT BANGALORE MAHANAGARA PALIKE
Consultant :	M/s Tejus Consultants
Contractor :	Sri.A G Narayana Swamy.
Date of Testing :	22-02-2022
Type of Mix :	Tack coat
Sample I/D :	4
Location :	Vinayaka nagar 2nd Main Road

Determination	Unit	Test No		
		1	2	3
Location :	**Chainage**	**@10**	**@25**	**@80**
Size of Plate (mxm)	Mt	0.30 x .30	0.30 x .30	0.30 x .30
Area of Plate (a)	Sq.mtr	0.09	0.09	0.09
Initial Wt of empty Plate (b)	Kg	0.786	0.794	0.806
Final weight of plate after application of tack Coat (c)	Kg	0.809	0.817	0.829
Weight of tack Coat (d=c-b)	Kg	0.023	0.023	0.023
Rate of spread of tack coat	Kg/sq.m	0.253	0.253	0.254
Average	Kg/sq.m	0.254		
Specified Limit	Kg/sq.m	**0.250 Kg/sq.m**		

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TEJUS

DETERMINATION OF RATE OF SPREAD TACK COAT

Name of Work :	Developments works to be under taken in Ward No.05 of BBMP around Solid Waste Disposal Processing units Bellahalli, Bagaluru and Kattigenahalli Byatarayanapura Constituency.
Client :	BRUHAT BANGALORE MAHANAGARA PALIKE
Consultant :	M/s Tejus Consultants
Contractor :	Sri.A G Narayana Swamy.
Date of Testing :	22-02-2022
Type of Mix :	Tack coat
Sample I/D :	3
Location :	Vinayaka nagara 5th Main Road

Determination	Unit	Test No		
		1	2	3
Location :	Chainage	@30	@80	@105
Size of Plate (mxm)	Mt	0.30 x .30	0.30 x .30	0.30 x .30
Area of Plate (a)	Sq.mtr	0.09	0.09	0.09
Initial Wt of empty Plate (b)	Kg	0.782	0.794	0.806
Final weight of plate after application of tack Coat (c)	Kg	0.805	0.817	0.829
Weight of tack Coat (d=c-b)	Kg	0.023	0.023	0.023
Rate of spread of tack coat	Kg/sq.m	0.253	0.253	0.254
Average	Kg/sq.m	0.254		
Specified Limit	Kg/sq.m	0.250 Kg/sq.m		

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BITUMEN CONTENT AND GRADATION DETERMINATION OF BITUMINOUS CONCRETE MIX

Name of Work	:	Developments works to be under taken in Ward No.05 of BBMP around Solid Waste Disposal Processing units Bellahalli, Bagaluru and Kattigenahalli Byatarayanapura Constituency.
Client	:	Bruhat Bengaluru Mahanagara Palike
Consultant	:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	:	Sri.A G Narayana Swamy.
Date of Testing	:	22-02-2022
Type of Mix	:	BC
Sample I/D	:	BC4

DETERMINATION OF BITUMEN CONTENT

Description	Trail 1	Trail 2
1. Weight of Mixture before extraction, g	899	954
2. Weight of Mixture after extraction, g	848	902
3. Weight of Bitumen	51	52
4. Weight of filter paper before extraction, g	2.00	2.15
5. Weight of filter paper after extraction, g	4.10	4.00
6. Weight of fines, g	2.10	1.85
7. Weight of Bitumen & fines	53.10	53.85
8. Bitumen content in %	5.91	5.64
9. Average Bitumen content in %	**5.78**	
10. Minimum Bitumen content in %	**5.40**	

GRADATION FOR BC AFTER EXTRACTION
(As per MORT&H 500-18,Grading-2)

Sample Location:	Chokkanahalli Main Road	Date of Sampling:	**22-02-2022**
		Date of testing:	**22-02-2022**
Type of material & Purpose:	**BC**	Oven Dry Wt.(gms):	848.0

IS Sieve size in mm	Weight retained	Cummulative weight retained (gm)	Cummulative % of retained	Cummulative % of passing	Specification limits
19.00	0	0	0.00	100.00	100.00
13.20	84	84.0	9.91	90.09	79 - 100
9.50	122	206.0	24.29	75.71	71 - 95
4.75	102	308.0	36.32	63.68	53 - 71
2.360	112	420.0	49.53	50.47	42 - 58
1.180	105	525.0	61.91	38.09	34 - 48
0.600	75	600.0	70.75	29.25	26 - 38
0.300	78	678.0	79.95	20.05	18 - 28
0.150	49	727.0	85.73	14.27	12 - 20
0.075	68	795.0	93.75	6.25	4 - 10
Pan	53.0	848.0			
Total	848.0				

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DETERMINATION OF RATE OF SPREAD TACK COAT

Name of Work :	Developments works to be under taken in Ward No.05 of BBMP around Solid Waste Disposal Processing units Bellahalli, Bagaluru and Kattigenahalli Byatarayanapura Constituency.
Client :	BRUHAT BANGALORE MAHANAGARA PALIKE
Consultant :	M/s Tejus Consultants
Contractor :	Sri.A G Narayana Swamy.
Date of Testing :	23-02-2022
Type of Mix :	Tack coat
Sample I/D :	6
Location :	Capital schhol opp road

Determination	**Unit**	**Test No**		
		1	**2**	**3**
Loacation	**Chainage**	**@58**	**@100**	**@120**
Size of Plate (mxm)	Mt	0.30 x .30	0.30 x .30	0.30 x .30
Area of Plate (a)	Sq.mtr	0.09	0.09	0.09
Initial Wt of empty Plate (b)	Kg	0.728	0.763	0.772
Final weight of plate after application of tack Coat (c)	Kg	0.751	0.786	0.795
Weight of tack Coat (d=c-b)	Kg	0.023	0.023	0.023
Rate of spread of tack coat	Kg/sq.m	0.253	0.252	0.253
Average	Kg/sq.m	0.253		
Specified Limit	Kg/sq.m	**0.250 Kg/sq.m**		

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DETERMINATION OF RATE OF SPREAD TACK COAT				
Name of Work :	Developments works to be under taken in Ward No.05 of BBMP around Solid Waste Disposal Processing units Bellahalli, Bagaluru and Kattigenahalli Byatarayanapura Constituency.			
Client :	BRUHAT BANGALORE MAHANAGARA PALIKE			
Consultant :	M/s Tejus Consultants			
Contractor :	Sri.A G Narayana Swamy.			
Date of Testing :	23-02-2022			
Type of Mix :	Tack coat			
Sample I/D :	5			
Location :	Chokkanahlli Main Road			
Determination	**Unit**	**Test No**		
		1	2	3
Loacation	**Chainage**	**@104**	**@228**	**@334**
Size of Plate (mxm)	Mt	0.30 x .30	0.30 x .30	0.30 x .30
Area of Plate (a)	Sq.mtr	0.09	0.09	0.09
Initial Wt of empty Plate (b)	Kg	0.786	0.805	0.778
Final weight of plate after application of tack Coat (c)	Kg	0.809	0.828	0.801
Weight of tack Coat (d=c-b)	Kg	0.023	0.023	0.023
Rate of spread of tack coat	Kg/sq.m	0.254	0.254	0.254
Average	Kg/sq.m	0.254		
Specified Limit	Kg/sq.m	**0.250 Kg/sq.m**		

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BITUMEN CONTENT AND GRADATION DETERMINATION OF DENSE BITUMINOUS MACADAM MIX

Name of Work	:	Developments works to be under taken in Ward No.05 of BBMP around Solid Waste Disposal Processing units Bellahalli, Bagaluru and Kattigenahalli Byatarayanapura Constituency.
Client	:	Bruhat Bengaluru Mahanagara Palike
Consultant	:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	:	Sri.A G Narayana Swamy.
Date of Testing	:	21-02-2022
Type of Mix	:	DBM
Sample I/D	:	DBM-4

DETERMINATION OF BITUMEN CONTENT

Description	Trail 1	Trail 2
1. Weight of Mixture before extraction, g	896	935
2. Weight of Mixture after extraction, g	856	894
3. Weight of Bitumen	40	41
4. Weight of filter paper before extraction, g	2.00	2.00
5. Weight of filter paper after extraction, g	4.00	4.00
6. Weight of fines, g	2.00	2.00
7. Weight of Bitumen & fines	42.00	43.00
8. Bitumen content in %	4.69	4.60
9. Average Bitumen content in %	4.64	
10. Minimum Bitumen content in %	4.50	

GRADATION FOR DBM AFTER EXTRACTION

(As per MORT&H 500-10,Grading-2)

Sample Location:	Vinayakanagar 5th mainRoad	**Date of Sampling:**	21-02-2022
		Date of testing:	21-02-2022
Type of material & Purpose:	DBM	**Oven Dry Wt.(gms):**	856

IS Sieve size in mm	Weight retained	Cummulative weight retained (gm)	Cummulative % of retained	Cummulative % of passing	Specification limits
37.50	0.0	0.0	0.00	100.00	100.00
26.50	42.0	42.0	4.91	95.09	90-100
19.00	128.0	170.0	19.86	80.14	71-95
13.20	118.0	288.0	33.64	66.36	56-80
4.750	160.0	448.0	52.34	47.66	38-54
2.360	105.0	553.0	64.60	35.40	28-42
0.300	183.0	736.0	85.98	14.02	7-21
0.075	65.0	801.0	93.57	6.43	2-8
Pan	62.0	863.0			
Total	856.0				

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DETERMINATION OF RATE OF SPREAD TACK COAT

Name of Work :	Developments works to be under taken in Ward No.05 of BBMP around Solid Waste Disposal Processing units Bellahalli, Bagaluru and Kattigenahalli Byatarayanapura Constituency.
Client :	BRUHAT BANGALORE MAHANAGARA PALIKE
Consultant :	M/s Tejus Consultants
Contractor :	Sri.A G Narayana Swamy.
Date of Testing :	25-02-2022
Type of Mix :	Tack coat
Sample I/D :	2
Location :	Chokkanahalli main road

Determination	**Unit**	**Test No**		
		1	**2**	**3**
Location :	**Chainage**	**@450**	**@600**	**@660**
Size of Plate (mxm)	Mt	0.30 x .30	0.30 x .30	0.30 x .30
Area of Plate (a)	Sq.mtr	0.09	0.09	0.09
Initial Wt of empty Plate (b)	Kg	0.780	0.794	0.806
Final weight of plate after application of tack Coat (c)	Kg	0.803	0.817	0.829
Weight of tack Coat (d=c-b)	Kg	0.023	0.023	0.023
Rate of spread of tack coat	Kg/sq.m	0.253	0.253	0.254
Average	Kg/sq.m	0.254		
Specified Limit	Kg/sq.m	**0.250 Kg/sq.m**		

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DETERMINATION OF RATE OF SPREAD TACK COAT

Name of Work :	Developments works to be under taken in Ward No.05 of BBMP around Solid Waste Disposal Processing units Bellahalli, Bagaluru and Kattigenahalli Byatarayanapura Constituency.
Client :	BRUHAT BANGALORE MAHANAGARA PALIKE
Consultant :	M/s Tejus Consultants
Contractor :	Sri.A G Narayana Swamy.
Date of Testing :	25-02-2022
Type of Mix :	Tack coat
Sample I/D :	1
Location :	Chokkanahalli main road

Determination	**Unit**	**Test No**		
		1	**2**	**3**
Location :	**Chainage**	**@150**	**@266**	**@387**
Size of Plate (mxm)	Mt	0.30 x .30	0.30 x .30	0.30 x .30
Area of Plate (a)	Sq.mtr	0.09	0.09	0.09
Initial Wt of empty Plate (b)	Kg	0.788	0.795	0.807
Final weight of plate after application of tack Coat (c)	Kg	0.811	0.818	0.830
Weight of tack Coat (d=c-b)	Kg	0.023	0.023	0.023
Rate of spread of tack coat	Kg/sq.m	0.253	0.253	0.254
Average	Kg/sq.m	0.254		
Specified Limit	Kg/sq.m	**0.250 Kg/sq.m**		

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BITUMEN CONTENT AND GRADATION DETERMINATION OF BITUMINOUS CONCRETE MIX

Name of Work	:	Developments works to be under taken in Ward No.05 of BBMP around Solid Waste Disposal Processing units Bellahalli, Bagaluru and Kattigenahalli Byatarayanapura Constituency.
Client	:	Bruhat Bengaluru Mahanagara Palike
Consultant	:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	:	Sri.A G Narayana Swamy.
Date of Testing	:	25-02-2022
Type of Mix	:	BC
Sample I/D	:	BC3

DETERMINATION OF BITUMEN CONTENT

Description	Trail 1	Trail 2
1. Weight of Mixture before extraction, g	901	953
2. Weight of Mixture after extraction, g	853	902
3. Weight of Bitumen	48	51
4. Weight of filter paper before extraction, g	2.00	2.15
5. Weight of filter paper after extraction, g	4.10	4.00
6. Weight of fines, g	2.10	1.85
7. Weight of Bitumen & fines	50.10	52.85
8. Bitumen content in %	5.56	5.55
9. Average Bitumen content in %	**5.55**	
10. Minimum Bitumen content in %	**5.40**	

GRADATION FOR BC AFTER EXTRACTION
(As per MORT&H 500-18,Grading-2)

Sample Location:	Chokkanahalli Main Road	Date of Sampling:	**25-02-2022**
		Date of testing:	**25-02-2022**
Type of material & Purpose:	BC	Oven Dry Wt.(gms):	853.0

IS Sieve size in mm	Weight retained	Cummulative weight retained (gm)	Cummulative % of retained	Cummulative % of passing	Specification limits
19.00	0	0	0.00	100.00	100.00
13.20	84	84.0	9.85	90.15	79 - 100
9.50	122	206.0	24.15	75.85	71 - 95
4.75	102	308.0	36.11	63.89	53 - 71
2.360	112	420.0	49.24	50.76	42 - 58
1.180	105	525.0	61.55	38.45	34 - 48
0.600	75	600.0	70.34	29.66	26 - 38
0.300	78	678.0	79.48	20.52	18 - 28
0.150	49	727.0	85.23	14.77	12 - 20
0.075	68	795.0	93.20	6.80	4 - 10
Pan	58.0	853.0			
Total	853.0				

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